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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,793	10/12/2001	Kenji Tanaka	PNDF-01168	7749
44987	7590	07/27/2005	EXAMINER	
HARRITY & SNYDER, LLP 11240 WAPLES MILL ROAD SUITE 300 FAIRFAX, VA 22030			PARK, JUNG H	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/974,793

Applicant(s)

TANAKA, KENJI

Examiner

Jung Park

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25 and 38 is/are allowed.
- 6) ☒ Claim(s) 24, 26-37 and 39-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

**DETAILED ACTION**

1. Claims 24-50 are pending for the examination.

***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Drawings***

3. The drawings are objected to because the "optical position" should be changed to -- optimal position -- in figure 7 and 9.  
Appropriate correction is required.

***Abstract Objections***

4. The abstract of the disclosure is objected to because applicant is reminded of the proper language and format for an abstract of the disclosure.

The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided.

Appropriate correction is required.

***Specification***

5. The disclosure is objected to because of the following informalities:

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. "The same" in the title misleads readers.

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Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 24, 26-37 and 39-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (U.S. Pub. 2002/0,044,554, hereinafter "Admission") in view of Kamiya (U.S. 6,704,321).

Regarding claim 24, Admission teaches a scheduling system comprising: a time slot (40 figure 6) that includes a plurality of positions (1-16 in 40 figure 6), each of the positions providing an opportunity for a cell associated with a line to be transmitted (60 figure 6);

a cell read sequence management table (*sequence management table* in 20a and 30 figure 6), which has a number of locations corresponding to the number of positions in the time slot to schedule transmission of cells associated with lines at positions of the time slot (between 30 and 40 figure 6; col. 1, para. 11);

Admission fails to teach a schedule management table for storing information identifying locations within the cell read sequence management table. However, Kamiya teaches the schedule management table (50 within 40 figure 1) stores information (col. 5, lines 10-11) identifying locations within the cell read sequence management table (40 figure 1, col. 5, lines 4-6) for cells associated with new lines based on transmission rates of the new lines (21a-n, figure 1; col. 5, lines 8-9). Therefore, it would have been obvious

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to one of ordinary skill in the art at the time of applicant's invention to combine the schedule management scheme in Kamiya with Admission because one would be motivated to include the schedule management table in order to reduce a bursty property at an output port in each ATM line by allocating the individual cells in the same line to respective positions dispersed within the time slot. Admission also teaches a schedule computation section (20a figure 6) to schedule a cell associated with a new line for transmission by identifying a location in the cell read sequence management table for the cell associated with the new line based on the information in the schedule management table (col. 2, para. 27; col. 2, para. 31).

Regarding claims 26-35 and 39-48, the claims are about the construction and operation of the conventional schedule computation section. The admitted prior art teaches all claims in column 2 of applicant's background. Especially, figure 6 shows most of the schedule computation section described in the claims. (see col. 2, para. 24 and 30-34 for more details).

Regarding claims 36 and 49, the lines corresponding to ATM lines (col. 1, para. 13).

Regarding claims 37 and 50, they are claims corresponding to claim 24 and are therefore rejected for the similar reasons set forth in the rejection of claim 24.

#### **Allowable Subject Matter**

8. Claims 25 and 38 are allowable over the prior art of record since the cited references taken individually or in combination fail to particularly teach or fairly suggest the schedule management table that is configured to identify a location in the cell read sequence management table for a line by multiplying the PCR value of the line by an integer to obtain a multiplication result and adding one to the multiplication result.

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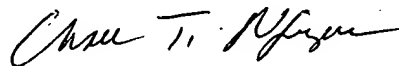
*Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- U.S. Patent (6,034,960) to Beshai et al. show about a scattering technique, based on reverse-binary or other mapping schemes, ensures that each given stream occupies time-slots that are well-spaced within the time-space map.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung Park whose telephone number is 571-272-8565. The examiner can normally be reached on Mon-Fri during 7:10-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JP  
Jung Park  
Patent Examiner  
Art Unit 2661  
July 20, 2005

  
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SUPERVISORY PATENT EXAMINER  
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